

Remarks/Arguments

Claims 21-43 and 45-47 are pending in the present application. Claims 21 and 25 have been amended. Claim 44 has been canceled.

Claim Rejections – 35 U.S.C. 112

Claims 41 and 44 have been rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. This rejection is traversed for the following reasons.

Claim 44 has been canceled.

Applicant further respectfully submits that description of the features of claim 41 can be found on page 6, lines 3-5 of the application which describes: "*In a preferred embodiment of the invention, a new set of cells is created containing the output values of the function.*" As further described on page 7, lines 28-29 of the application in connection with Figs. 28-32a for instance: "*In a preferred embodiment, the function builder creates a new set or panel of cells to hold output function values.*" Applicant respectfully submits that one of ordinary skill would realize that the output panel "IF" is automatically created or generated by the model builder.

Accordingly, Applicant respectfully submits that the features of claim 41 are described in the application as filed in such a way as to reasonably convey that Applicant had possession of the claimed invention, and that claim 41 is thus in

compliance with 35 U.S.C. 112, first paragraph. The Examiner is thus requested to withdraw this rejection.

Claim Rejections – 35 U.S.C. 103

Claims 21-23, 25, 28-37, 40, 41, 44 and 46 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2009/0083615 to Kotler et al. (hereafter "Kotler"), in view of U.S. Patent No. 5,603,021 to Spencer et al. (hereafter "Spencer"). This rejection, insofar as it may pertain to the presently pending claims, is traversed for the following reasons.

One of the fundamental problems in the art of spreadsheets is that data and functionality are mixed together in the user interface. Modern spreadsheets require the user to specify the destination cell **before** entering a formula. Further, a formula in conventional spreadsheets returns a **single** value for the cell to which it is related. Tools or **functionalities** such as array functionality have been developed to **imitate** functions with multivariable output.

A functionality or tool, in this case, requires manual input when modifying a workbook and does not automatically adjust the output when the input changes, for example when the number of input cells changes. In contrast, a function operates on input and automatically adjusts the output irrespective of changes in input data, e.g. the number of input cells.

Claim 21 has been amended to more clearly feature that the function builder builds relations between at least one input panel and an output panel, the output panel comprising a plurality of cells.

In contrast to conventional spreadsheet systems, the electronic mathematical model builder of an embodiment of this application provides a model builder that is able to handle and perform multi-output value functions without the need for complex and tedious tools requiring manual invocation, by enabling establishment of a function between at least one input panel and an output panel with a plurality of cells. These features are described and illustrated variously in the present application, for example in connection with Fig. 10 and page 13, lines 4-12; and Figs. 17-18 and page 17, lines 4-26.

It is an important advantage of the electronic mathematical model builder of an embodiment of this application that a function created with the function builder is not inherently connected to a specific cell as in conventional spreadsheets. On the contrary, the operator of the mathematical model builder is free to define input variables containing input values for the function and output panels with a plurality of cells containing output values of the function.

Furthermore, it is an important advantage of the electronic mathematical model builder of an embodiment of this application that functions are separated from the input variables and the output panels, reducing the risk of errors when changing a model,

since a function works on panels and not a specific and single cell in a large cell area as formulas in conventional spreadsheets.

Further, the electronic mathematical model builder of an embodiment of this application allows flexible model management with highly reduced risk of errors, and enables provision of general models to be easily amended and adjusted for different specific purposes by a person of ordinary skill without specific knowledge about the model itself.

In contrast, Kotler as described in paragraph [0017] relates to spreadsheet fields in text allowing *"insertion of discrete, individual fields, referred to as "free floating fields", inline with normal textual sentences."* As further described in paragraph [0040] of Kotler, each free floating field is equivalent to a single cell.

Applicant thus respectfully submits that Kotler does not disclose *"a function builder configured for generation of an output panel comprising a plurality of cells to hold output function values, wherein the function builder is configured for establishing a function comprising mathematical relations between at least one input panel and the output panel, the function builder comprising fields for user specification of a desired function by mathematical operators, and input variables of the function"*, as would be necessary to meet the features of claim 21. In Kotler, a formula is assigned to a **single** cell (see e.g., 126(1), 126(2), 506, 610 and Cost fields of roof and kitchen in Table 606 in Fig. 6) as in conventional spreadsheets. Kotler merely discloses assigning a formula to a single cell or free floating field.

In the Final Office Action dated November 26, 2010, the Examiner also relied upon Spencer as allegedly disclosing a formula composer in an electronic spreadsheet system for assigning a formula to a single cell. However, Spencer also does not provide *"a function builder configured for generation of an output panel comprising a plurality of cells to hold output function values, wherein the function builder is configured for establishing a function comprising mathematical relations between at least one input panel and the output panel, the function builder comprising fields for user specification of a desired function by mathematical operators, and input variables of the function."*

The electronic mathematical model builder such as in claim 21 enables a user to build functions between at least one input panel and an output panel of cells, the output panel comprising a plurality of cells, thereby allowing a user to employ multi-value output functions without the use of complex and tedious tools or functionalities.

Both Kotler and Spencer are silent on overcoming the problem of providing a model builder that is able to allow a user to employ multi-value output functions without the use of complex and tedious tools or functionalities. Thus, the cited prior art contains no teaching that would motivate one of ordinary skill to modify the prior art to meet the features of claim 21. Applicant therefore respectfully submits that the electronic mathematical model builder of claim 21 would not have been obvious in view of the prior art as relied upon by the Examiner taken singularly or together, and that this

rejection, insofar as it may pertain to claims 21-23, 25, 28-37, 40, 41, 44 and 46, is improper for at least these reasons.

Claims 24, 26, 27, 38, 39, 42, 43, 45 and 47 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler and Spencer, in view of U.S. Patent Application Publication No. 2005/0039114 to Naimat et al. (hereafter "Naimat").

Applicant however respectfully submits that Naimat as secondarily relied upon does not overcome the above noted deficiencies of the primarily relied upon prior art, and that this rejection is thus improper for at least these reasons.

Conclusion

The Examiner is respectfully requested to reconsider and withdraw the corresponding rejections, and to pass the claims of the present application to issue, for at least the above reasons.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment for any additional fees that may be required, or credit any overpayment, to Deposit Account No. 50-0238.

Respectfully submitted,
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